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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,596	08/24/2006	Kunio Gobara	MAT-8894US	8964
53473	7590	04/13/2009	EXAMINER	
RATNERPRESTIA P.O. BOX 980 VALLEY FORGE, PA 19482			FIALKOWSKI, MICHAEL R	
			ART UNIT	PAPER NUMBER
			2419	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/590,596

**Applicant(s)**

GOBARA ET AL.

**Examiner**

MICHAEL FIALKOWSKI

**Art Unit**

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-850)  
Paper No(s)/Mail Date August 24 2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Inventor's Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code on pages 3 and 26. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.
2. The disclosure is objected to because of the following informalities: on page 3, the heading on line 25 should be corrected to "**SUMMARY OF THE INVENTION**", on page 6, line 4 should be corrected to "**EXEMPLARY EMBODIMENT**"

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Aggarwal et al (5,675,741).

Re claim 1, Aggarwal et al discloses an information-processing device at a communication source (querying node), that communicates with an information-processing device at a communication destination (destination) through a

communication control device (for example, CPU can access a network [col. 4, lines 60-65]) at the communication source, comprising:

a span of packet life setting part (incremental TTL value program [col. 5, lines 50-55]) that sets a span of packet life in a range in which a bubble packet (UDP probe packet [col. 3, lines 63-67]) transmitted from the information-processing device at the communication source (for example, general purpose computer [col. 4, lines 60-65]) in order to leave a transmission history (record IP address in path list [col. 4, lines 10-15]) in the communication control device at the communication source, does not reach the information-processing device at the communication destination (for example, message is received from an intermediate node indicating TTL\_EXCEEDED [col. 4, lines 10-15]); and

a bubble packet transmitter that transmits a bubble packet (for example, socket sends UDP packets out [col. 3, lines 55-60]) having a span of packet life that the span of packet life setting part has set [col. 3, lines 60-66], through the communication control device at the communication source.

Re claim 2, Aggarwal et al discloses an information-processing device wherein communication between the information-processing device at the communication destination and the information-processing device at the communication source is performed through a communication control device at the communication destination (destination node is capable of sending PORT\_UNREACHABLE message and thus capable of providing communication control [col. 4, lines 20-26]) ; and

wherein the span of packet life setting part sets a span of packet life in a range in which a bubble packet does not reach the communication control device at the communication destination (for example, message is received from an intermediate node indicating TTL\_EXCEEDED [col. 4, lines 10-15]).

Re claim 3, Aggarwal et al discloses an information-processing device wherein the span of packet life setting part sets a span of packet life so that the bubble packet can reach a relay node (for example r1, [col. 6, lines 59-65] which is a router/gateway over the internet [col. 3, lines 10-17]) that relays packets from a global address to another global address (intermediate devices send ICMP messages back to querying node and record IP addresses [col. 4, lines 10-15]).

Re claim 4, Aggarwal et al discloses an information-processing device wherein the span of packet life setting part sets a span of packet life so that the bubble packet can reach a relay node closest (In Figure 1, r1 is adjacent to the querying node) to the information-processing device at the communication source (for example, a TTL = 1, r1 will send the ttl\_exceeded ICMP message [col. 6, lines 59-63]), out of relay nodes that relay packets from a global address to another global address.

Re claim 5, Aggarwal et al discloses an information-processing device wherein the span of packet life setting part sets a span of packet life with increasing the number of relay nodes that the bubble packet can reach (increments the TTL by one [col. 4, lines 26-36]), by one every time the bubble packet transmitter transmits a bubble packet (UDP probe packet), until communication is established between the information-processing device at the communication source and the information-

processing device at the communication destination (if a port\_unreachable message is received, the destination has been reached [col. 4, lines 20-26]).

Re claim 6, Aggarwal et al discloses an information-processing device wherein the span of packet life setting part sets a span of packet life with which the bubble packet can reach a relay node located before the communication control device at the communication destination (for example, r5 (shown before the destination in Figure 1) is located with a time to live = 6, [col. 7, lines 5-10].

Re claim 7, Aggarwal et al discloses an information-processing device wherein the span of packet life setting part sets a TTL (Time To Live) for a bubble packet [col. 3, lines 63-66].

Re claim 8, Aggarwal et al discloses an information-processing device further comprising a relay node counter (for example, how\_far\_is\_source [col. 6, lines 55-68]) that counts the number of relay nodes (for example, 3) from the information-processing device at the communication source (querying node), wherein the span of packet life setting part sets a life of the bubble packet based on the number of relay nodes counted by the relay node counter (curr\_ttl is a variable stored that gives the number of relay nodes [col. 5, lines 33-38 & 43-46]).

Re claim 9, Aggarwal et al discloses an information-processing device wherein the relay node counter counts the number of relay nodes with trace route (for example, determines a tracing a route from any source to any destination [col. 2, lines 21-26]).

Re claim 10, Aggarwal et al discloses an information-processing device further comprising a relay node counter that counts the number of relay nodes (curr\_ttl is a

variable stored that gives the number of relay nodes [col. 5, lines 33-38 & 43-46]) located from the information-processing device at the communication source to a relay node closest to the information-processing device at the communication source (for example, a TTL = 1, r1 will send the ttl\_exceeded ICMP message [col. 6, lines 59-63]) , out of relay nodes that relay packets from a global address to another global address, wherein the span of packet life setting part sets a span of packet life of the bubble packet based on the number of relay nodes counted by the relay node counter (send a UDP probe packet to destination with TTL value equal to (curr\_ttl+1) [col. 6, lines 1-7]).

Re claim 11, Aggarwal discloses a method of transmitting a bubble packet in an information-processing device at a communication source (querying node) that communicates with an information-processing device at a communication destination (destination) through a communication control device at the communication source (for example, CPU can access a network [col. 4, lines 60-65]), comprising: setting a span of packet life (incremental TTL value program [col. 5, lines 50-55]) in a range in which a bubble packet (UDP probe packet [col. 3, lines 63-67]) transmitted from the information-processing device at the communication source in order to leave a transmission history (record IP address in path list [col. 4, lines 10-15]) in the communication control device at the communication source, does not reach the information-processing device at the communication destination (for example, message is received from an intermediate node indicating TTL\_EXCEEDED [col. 4, lines 10-15]); and transmitting a bubble packet that transmits a bubble packet (for example, socket sends UDP packets out [col. 3, lines 55-60]) having a span of packet life that the span

of packet life setting part has set [col. 3, lines 60-66], through the communication control device at the communication source.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Slater (6,952,421) is cited for containing a path detection method and system which takes place over Ethernet. Zhang et al (2003/0152034) is cited for containing a path detection system in a P2P environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL FIALKOWSKI whose telephone number is (571)270-5425. The examiner can normally be reached on Monday - Friday 9:30am-7pm EST, alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Ryman can be reached on (571)272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. F./  
Examiner, Art Unit 2419

/Daniel J. Ryman/  
Supervisory Patent Examiner, Art Unit 2419